



BF18D- P40

High-Resolution Image and High-Throughput System

Desktop High speed Automated Optical Inspection machine



■ Industry-Leading High Throughput

The Alternate Color Digital Scanning System(*1) provides a single scan to capture the entire PCB image and therefore gives a very high throughput. The Scanning speed is only 14 s for the M size PCB (250mmx330mm).

(*1) The liner scanning and alternate lightning system capture the multi images of the whole PCB with single scan.

■ High-resolution Imaging System

The high resolution of 18 micron m with color line CCD provide more accurate and stable inspections for the solder filets on small components such as 0201 (0603) chip and 0.4mm pitch lead.

■ High Accuracy

The Telecentric Lens(*2) and the Automatic Digital Shading System(*3) increase the repeatability and the compatibility, and hence provide high accuracy of the inspection result. In addition, Green / Blue LED provides more accurate capability of character recognition and polarity detection.

(*2) The unique lens developed is able to compensate the distortion (the field angle) of the image for a more accurate detection.

(*3) The brightness of each pixel for a clearer image is calibrated automatically.

■ Wide Range of Application

The clearance of the PCB from upper 40mm to lower 60mm is designed which is able to handle the PCB with tall components. The Desktop machine is applicable to any process, after solder printing, after mounting process and after flow / reflow process. The loading table is detachable and therefore the customer can set their original designed PCB holder.

■ Safety

The area sensor at the loading entrance is standard to ensure the safety of the operator.

■ Pre scanning

While checking and repairing the defect PCB, the machine can start the scanning of the next PCB which increase the production speed.

■ Easy-to-use Interface and Recipe Setup

The user-friendly Graphic User Interface (G.U.I.) simplifies the operational steps and also reduces the recipe setup time. The images captured with the Alternate Color Digital Scanning System are saved in the memory. The defect inspection is then made from the saved images which results very high throughput.

■ Auto update function

The inspection data made in offline teacher (BF-Editor) is automatically updated into the desktop machine without stopping inspection. It keeps high efficiency of the desktop machine.

■ Real Time SPC Information

The real time SPC information is shown to support the management of production quality, and therefore the increase of production yield. BF series together with the analysis packages such as BF-Repair, BF-Editor, BF-Monitor and BF-View classify defects in real time during inspection, providing immediate feedback on defect types.

■ Recognition Barcode and traceability function

Capability of recognition of Barcode, 1D/2D (QR, data matrix) together with the analysis packages assure the traceability of the production.

■ Automatic inspection data application

The both sides of the PCB are recognized automatically after scanning them separately and the tool applies the pre setting recipe to each side. The function keys are also assigned to maximum 4 recipes and apply each one with a side.

■ Automatic inspection start

The entrance area sensor detects the timing when the operator loads the PCB and it automatically start the inspection without pushing the start button each time. The area sensor ensures the safety and efficiency of inspection procedure.

(Note: This function is selectable.)



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Model

BF18D-P40

System Specifications

Conveyable board size 2"×2" – 10"×13"
(50×50 – 250×330mm)

Board thickness range 0.01" – 0.1" (0.3 – 2.5mm)

Board plainness +/- 0.08" (2mm)

Clearance Top: 1.57" (40mm)
From PCB Bottom: 2.36" (60mm)

Rotated component support Available for 0 - 359 ° rotation
(unit of 1 °)

Inspection items missing, shift, miss alignment,
Tom Stone, reverse, polarity,
other component, bridge, dirt, dust,
no solder, short solder, cold solder,
lifted chip, lifted lead, un insertion,
OCR: optical character
recognition/verification,
After Printing Process: No solder
paste, excess, blur, scratch, short,
shift, bridge

Scanning speed 10"×13" (250×330mm) :14s

Typical inspection speed 0.1ms/Window

Camera (image processing) Color line CCD

Image resolution 18 μm

Lighting system Green / White / Blue LED

Adjustment of conveyor Manual

OS Windows2000 (Choose from
Japanese/English)

Available with Saki Inline Option systems;
BFRP-1, BF-Editor, BF-Monitor, BF-View

System Requirements

Electrical Requirement AC 100-240V, 800VA, 50/60Hz

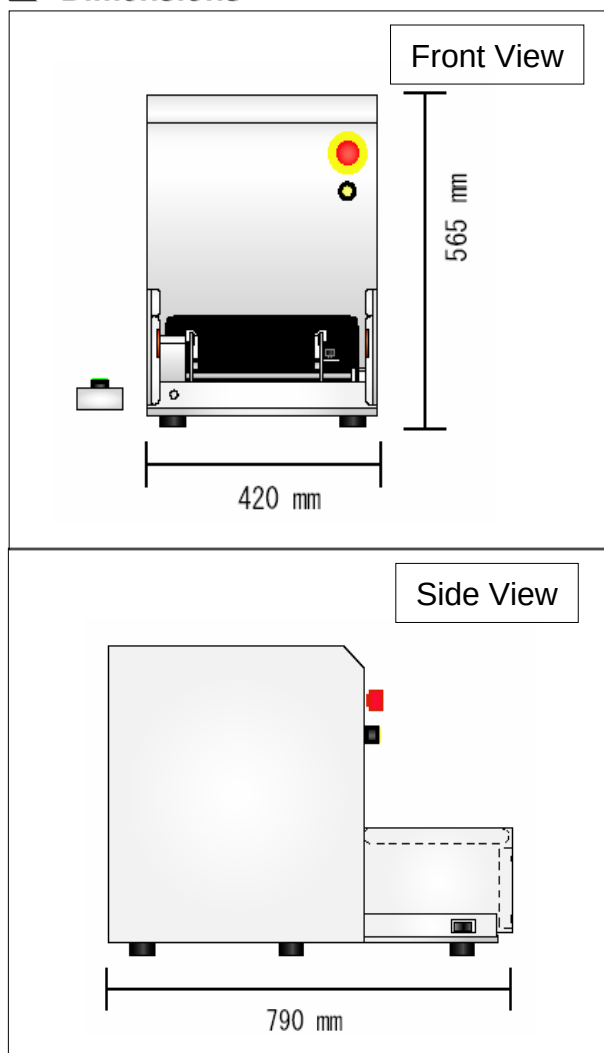
Compressed air requirement Unnecessary

Temperature/ Humidity 15 to 30 degree C/ 5 to 80 % RH (No
Condensation)

Dimensions (w*d*h) 15.54*31.10*22.24"
(420*790*565mm)

Weight 45Kg (without monitor and PC)

Dimensions



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